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ENFORCEMENT AND
FIELD OPERATIONS

Texas Department of Water Resources

INTEROFFICE MEMORANDUM

TO : George Green, Chief, Field Support Section DATE Feb. 5, 1979
THRU : (file)

FROM : Karen A. Macko, District 7 Representative
SUBJECT Amoco Texas Refining Company, I.S.W. No. 30129

Introduction:

On January 18, 1979, an annual inspection of the Texas City refinery waste disposal site was made with Mr. Bob Alexander, Consultant-Environmental Control, and Mr. Randall Browning, Engineer. Amoco is in the process of amending their registration to include an additional 68 acre landfarm.

Findings:

The refinery is completely surrounded by a dike of varying proportions. All rainfall runoff within the refinery is collected in two stormwater retention basins and later treated by the wastewater treatment facility operated by Gulf Coast Waste Disposal Authority.

API Separator Systems

Seven unlined earthen ponds are associated with the three API separator systems. One 2.7 acre pond is split into a waste chemical disposal area and an oily water impoundment. Oil is skimmed from the chemical pond and re-refined. There are no monitor wells associated with any of the earthen ponds. Amoco intends to close out the six smaller ponds (about 50 feet by 50 feet) as soon as a recently installed clarifier is on-line. Sludges will be pumped from the bottom of the clarifier to the new 68-acre landfarm. In the past, sludges dredged from the bottom of the seven ponds have been used for in-plant construction (firewalls, dikes, road beds, etc.). Amoco has no plans to abandon the chemical **RECEIVED** water impoundment.

Landfill

There is a small "landfill" area (less than an acre) for ~~containing~~ **RECEIVED** oily lead sludges within the confines of the refinery perimeter

Amoco Texas Refining Company
P-jo 2
February 5, 1979

dike. Oxidized sludges are later used for dike repairs and other in-plant earthwork.

Landfarms

Both of the landfarms have been deed recorded in Galveston County.

The 150-acre landfarm began operations in late 1973. Accumulated oily sludges in the refinery were landfarmed from 1973 to 1977. Biosludges from the Gulf Coast Waste Disposal Authority wastewater treatment facility were pumped to the landfarm beginning in 1976. All runoff from the 150 acres is collected and returned to the treatment plant via pipeline. Although rainfall is heaviest during the winter months, most of the plots were dry and in different stages of biodegradation.

A request for an additional 68-acre landfarm was received by this agency by letter in October, 1976. Amoco intends to start construction on the individual plots and collection systems during the first half of this year. Silt dewatering sediments (Class III) dredged from the adjacent basins (see map) have been dumped in this area. API separator sludges will be pumped from the clarifier to the individual plots.

CAM

Amoco has purchased the old Smith-Douglass fertilizer plant site. A coalition of area industries, CAM (Union Carbide, Amoco, Monsanto), intends to build a steam generating plant using either coal or lignite on the 20-acre site. Amoco plans to level the waste gypsum pile over the 20 acres to a height of eight feet and cap with two feet of clay. For the past seven months, rainfall runoff has been collected in the two lagoons surrounding the gypsum pile and pumped to the Gulf Coast Waste Disposal Authority wastewater treatment facility. The water (low pH, high phosphorus content) has been used as a nutrient in treatment process in lieu of purchasing additional phosphoric acid.

Recommendations:

There are no recommendations at this time.

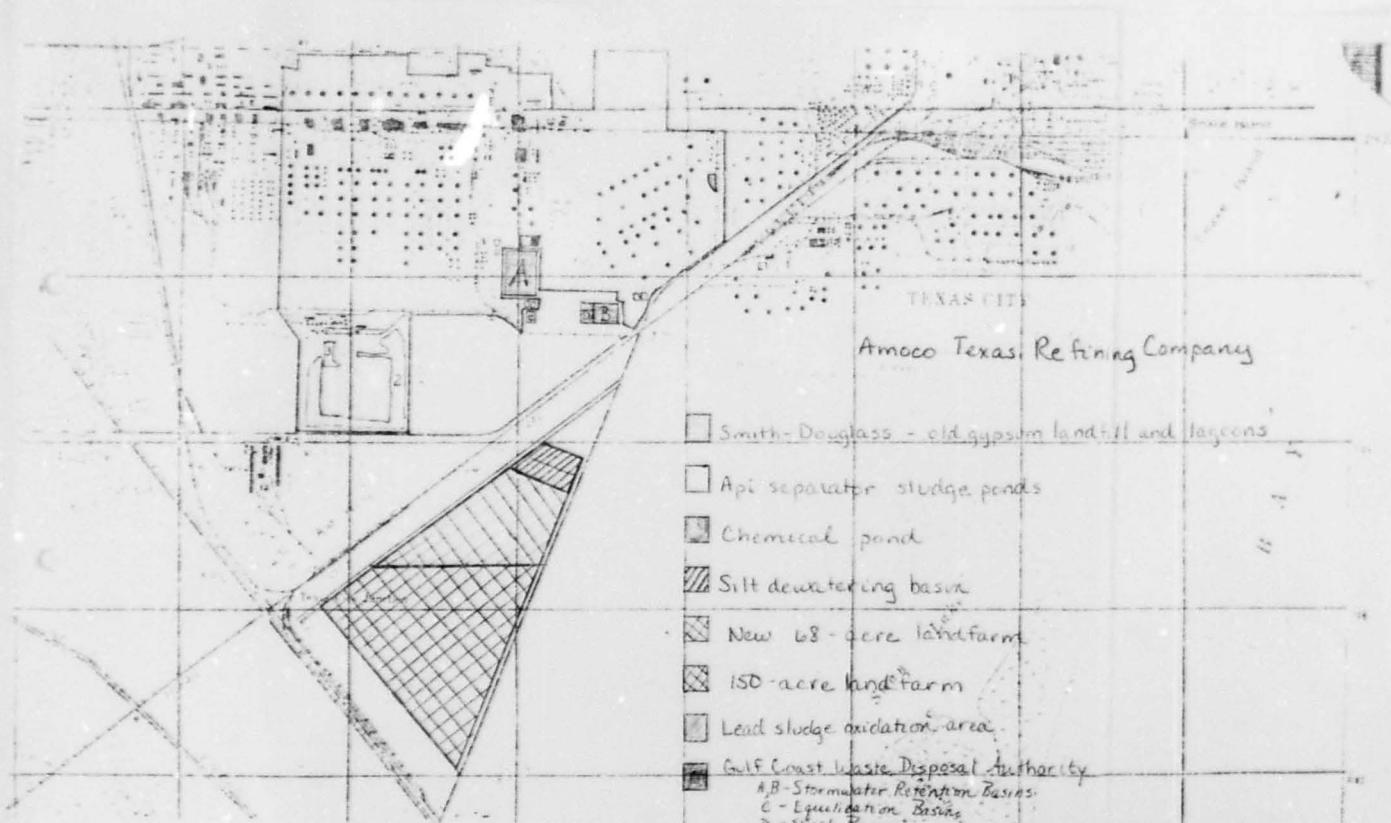
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KAM:tmr

Signed: Karen A. Macko

CRWDWR

Approved: Billy H. Beggs



Amoco Texas Refining Company

- Smith-Douglas - old gypsum landfill and lagoons
- API separator sludge ponds
- Chemical pond
- Silt dewatering basin
- New 68-acre landfarm
- 150-acre landfarm
- Lead sludge oxidation area
- Gulf Coast Waste Disposal Authority
 - A-B - Stormwater Retention Basins
 - C - Equilibration Basins
 - D - Shock Basin

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Part II - Waste Characteristics

A. Waste Products Received Disposal

| Waste Code | Quantity (Monthly) | Units* | Hazardous Properties <i>Disposal Method</i> | Description |
|------------|-----------------------|--------|--|--|
| 340150 | | | Silt | intake water clarification sludge |
| 340210 | | | Deionizing Basin | water treating sludges from ammonia plant |
| 340170 | | | | Boiler water treating sludges |
| 109480 | | | Injection | Sour water |
| 109170 | | | Well | ammonium anion regeneration water |
| 100690 | | | " | Spent caustics |
| 109900 | | | " | Tank water bottoms |
| 109410 | | | " | Dilute ME & solutions |

* tons*, gallons*, Cubic Yards*, drums (55-gallon),
Other - specify.

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TEXAS WATER QUALITY BOARD
Solid Waste Disposal Compliance Survey

Date 4/18/79 Permit No. 00312
Inspector Karen A. Macko Registration No. 30139
Compliant Commercial/Noncommercial
Noncompliant (See Part VI) Class I Class II Class III

Part I - General Information

Name of Company Amoco Texas Refining Company
Company's Address 2401 Fifth Avenue South
Site Address Texas City 77590
Type of Industry Oil Refinery

Officials Contacted:

| (Name) | (Title) | (Phone) |
|-------------------------|---------------------------------|-----------------|
| <u>Bob Alexander</u> | <u>Consultant, Env. Control</u> | <u>945-7152</u> |
| <u>Randall Browning</u> | <u>Engineer</u> | <u>945-7152</u> |

District 7 County Galveston Basin San Jac-Blaze
Segment No. 2431

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WQB 234 (11-76)

4/20/79

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Part II - Waste Characteristics

A. Waste Products Received Produced

| Waste Code | Quantity (Monthly) | Units* | Hazardous Properties Disposal Method | Description |
|------------|-----------------------|--------|---|----------------------|
| 100500 | | | City Sewer | Na Zeolite |
| 100460 | | | " | Desalter water |
| 109270 | | | W.C.O. 00443 | Ballast water |
| 100870 | | | " | AI Chloride solution |
| 371300 | | | Texas City | Fluid cracking cut |
| 280560 | | | Landfill | Trash + garbage |
| 371760 | | | " | Bulky trash |

* tons*, gallons*, Cubic Yards*, drums (55-gallon),
Other - specify.

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Part II - Waste Characteristics

A. Waste Products Received Produced

| Waste Code | Quantity (Monthly) | Units* | Hazardous Properties | Description |
|-------------------------|-----------------------|--|----------------------|---|
| <u>Disposal Methods</u> | | | | |
| 100690 | ? | Injection well | Malone | |
| 109480 | ? | failure - normally WWWS, 127,138 | caustics | Sour water |
| 101110 | | | | Cleaning solutions |
| 151010 | | | | Polyethylene glycol |
| 100040 | | | | Sulfuric acid |
| 2 - ? | | | | Gypsum from Smith - Douglass site |

* tons*, gallons*, Cubic Yards*, drums (55-gallon),
Other - specify.

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PART II - IMPOUNDMENT INVENTORY

| | | |
|--|--|---|
| A. Impoundment No. 1 | B. Age 4 yrs. | C. Surface area 11.7 acres |
| D. Purpose of Impoundment | E. Is impoundment presently used? <input checked="" type="checkbox"/> Yes - Give number of years in use 4 yrs. <input type="checkbox"/> No - Give last year used _____ | |
| <input checked="" type="checkbox"/> Waste storage <input type="checkbox"/> Waste treatment (specify) _____ <input type="checkbox"/> Other _____ | F. Average daily effluent Year of record _____ Average daily effluent _____ gallons per day Year of record _____ gallons per day | Not Applicable |
| G. Type of Liner <input checked="" type="checkbox"/> None <input type="checkbox"/> Compacted native soil <input type="checkbox"/> Select clay <input type="checkbox"/> Bentonite-clay <input type="checkbox"/> Concrete If clay liner give thickness in inches _____ | H. Type of waste Refinery effluent | I. Number of Monitoring Wells 0 Frequency of Monitor Well sampling <input type="checkbox"/> Monthly <input checked="" type="checkbox"/> Quarterly <input type="checkbox"/> Semiannually <input type="checkbox"/> Yearly <input type="checkbox"/> Other _____ |
| A. Impoundment No. 2 | B. Age 4 yrs. | C. Surface area 8.1 acres |
| D. Purpose of Impoundment | E. Is impoundment presently used? <input checked="" type="checkbox"/> Yes - Give number of years in use 4 yrs. <input type="checkbox"/> No - Give last year used _____ | |
| <input checked="" type="checkbox"/> Waste storage <input type="checkbox"/> Waste treatment (specify) _____ <input type="checkbox"/> Other _____ | F. Average daily effluent Year of record _____ Average daily effluent _____ gallons per day Year of record _____ gallons per day | Not Applicable |
| G. Type of Liner <input checked="" type="checkbox"/> None <input type="checkbox"/> Compacted native soil <input type="checkbox"/> Select clay <input type="checkbox"/> Bentonite-clay <input type="checkbox"/> Concrete If clay liner give thickness in inches _____ | H. Type of waste Refinery effluent | I. Number of Monitoring Wells 0 Frequency of Monitor Well sampling <input type="checkbox"/> Monthly <input type="checkbox"/> Quarterly <input checked="" type="checkbox"/> Semiannually <input type="checkbox"/> Yearly <input type="checkbox"/> Other _____ |
| A. Impoundment No. 3 | B. Age 4 yrs. | C. Surface area 1.6 acres |
| D. Purpose of Impoundment | E. Is impoundment presently used? <input checked="" type="checkbox"/> Yes - Give number of years in use 4 yrs. <input type="checkbox"/> No - Give last year used _____ | |
| <input type="checkbox"/> Waste storage <input checked="" type="checkbox"/> Waste treatment (specify) _____ <input type="checkbox"/> Other _____ | F. Average daily effluent Year of record _____ Average daily effluent _____ gallons per day Year of record _____ gallons per day | 13,784 |
| G. Type of Liner <input checked="" type="checkbox"/> None <input type="checkbox"/> Compacted native soil <input type="checkbox"/> Select clay <input type="checkbox"/> Bentonite-clay <input type="checkbox"/> Concrete If clay liner give thickness in inches _____ | H. Type of waste Refinery effluent | I. Number of Monitoring wells 0 Frequency of Monitor Well sampling <input type="checkbox"/> Monthly <input type="checkbox"/> Quarterly <input checked="" type="checkbox"/> Semiannually <input type="checkbox"/> Yearly <input type="checkbox"/> Other _____ |

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PART II - IMPOUNDMENT INVENTORY

| | | |
|---|--|-----------------------------|
| A. Impoundment No. 4 | B. Age _____ | C. Surface area _____ acres |
| D. Purpose of Impoundment | E. Is impoundment presently used? <input checked="" type="checkbox"/> Yes - Give number of years in use _____ 4 yrs. <input type="checkbox"/> No - Give last year used _____ | |
| <input checked="" type="checkbox"/> Waste storage <input type="checkbox"/> Waste disposal | F. Average daily influent Year of record _____ gallons per day | |
| <input type="checkbox"/> Waste treatment (Specify) | Average daily effluent _____ gallons per day | |
| <input type="checkbox"/> Other _____ | Year of record _____ 1978 | |
| G. Type of liner | H. Type of waste Refinery _____ | |
| <input checked="" type="checkbox"/> None <input type="checkbox"/> PVC | I. Number of Monitoring Wells _____ 0 | |
| <input type="checkbox"/> Compacted native soil <input type="checkbox"/> Hypalon | Frequency of Monitor Well sampling: <input type="checkbox"/> Monthly <input checked="" type="checkbox"/> Quarterly <input type="checkbox"/> Semiannually | |
| <input type="checkbox"/> Select clay <input type="checkbox"/> Polyethylene | <input type="checkbox"/> Yearly <input type="checkbox"/> Other _____ | |
| <input type="checkbox"/> Bentonite-clay <input type="checkbox"/> Other _____ | J. Number of Monitoring Wells _____ | |
| <input type="checkbox"/> Concrete | Frequency of Monitor Well sampling: <input type="checkbox"/> Monthly <input checked="" type="checkbox"/> Quarterly <input type="checkbox"/> Semiannually | |
| If clay liner give thickness in inches _____ | | |
| A. Impoundment No. 4 | B. Age _____ | C. Surface area _____ acres |
| D. Purpose of Impoundment | E. Is impoundment presently used? <input type="checkbox"/> Yes - Give number of years in use _____ <input type="checkbox"/> No - Give last year used _____ | |
| <input type="checkbox"/> Waste storage <input type="checkbox"/> Waste disposal | F. Average daily influent Year of record _____ gallons per day | |
| <input type="checkbox"/> Waste treatment (Specify) | Average daily effluent _____ gallons per day | |
| <input type="checkbox"/> Other _____ | Year of record _____ | |
| G. Type of liner | H. Type of waste Refinery _____ | |
| <input type="checkbox"/> None <input type="checkbox"/> PVC | I. Number of Monitoring Wells _____ | |
| <input type="checkbox"/> Compacted native soil <input type="checkbox"/> Hypalon | Frequency of Monitor Well sampling: <input type="checkbox"/> Monthly <input checked="" type="checkbox"/> Quarterly <input type="checkbox"/> Semiannually | |
| <input type="checkbox"/> Select clay <input type="checkbox"/> Polyethylene | <input type="checkbox"/> Yearly <input type="checkbox"/> Other _____ | |
| <input type="checkbox"/> Bentonite-clay <input type="checkbox"/> Other _____ | J. Number of Monitoring Wells _____ | |
| <input type="checkbox"/> Concrete | Frequency of Monitor Well sampling: <input type="checkbox"/> Monthly <input checked="" type="checkbox"/> Quarterly <input type="checkbox"/> Semiannually | |
| If clay liner give thickness in inches _____ | | |
| A. Impoundment No. 4 | B. Age _____ | C. Surface area _____ acres |
| D. Purpose of Impoundment | E. Is impoundment presently used? <input type="checkbox"/> Yes - Give number of years in use _____ <input type="checkbox"/> No - Give last year used _____ | |
| <input type="checkbox"/> Waste storage <input type="checkbox"/> Waste disposal | F. Average daily influent Year of record _____ gallons per day | |
| <input type="checkbox"/> Waste treatment (Specify) | Average daily effluent _____ gallons per day | |
| <input type="checkbox"/> Other _____ | Year of record _____ | |
| G. Type of liner | H. Type of waste Refinery _____ | |
| <input type="checkbox"/> None <input type="checkbox"/> PVC | I. Number of Monitoring Wells _____ | |
| <input type="checkbox"/> Compacted native soil <input type="checkbox"/> Hypalon | Frequency of Monitor Well sampling: <input type="checkbox"/> Monthly <input checked="" type="checkbox"/> Quarterly <input type="checkbox"/> Semiannually | |
| <input type="checkbox"/> Select clay <input type="checkbox"/> Polyethylene | <input type="checkbox"/> Yearly <input type="checkbox"/> Other _____ | |
| <input type="checkbox"/> Bentonite-clay <input type="checkbox"/> Other _____ | J. Number of Monitoring Wells _____ | |
| <input type="checkbox"/> Concrete | Frequency of Monitor Well sampling: <input type="checkbox"/> Monthly <input checked="" type="checkbox"/> Quarterly <input type="checkbox"/> Semiannually | |
| If clay liner give thickness in inches _____ | | |

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Part III - Waste Disposal Records

- A. Does the company maintain internal operational records?
(Yes) (No) GLWDA - Yes
- B. Do the records include a waste description? (Yes)
(No) _____ Amount? (Yes) _____ (No) Location? (Yes)
(No) _____
- C. Does the company maintain required monitoring data? (Yes)
(No) _____. If No, comment _____
- D. Does the monitoring data include sample points? (Yes)
(No) _____ Dates? (Yes) (No) _____ Analyses? (Yes)
(No) _____
- E. Has the company recorded or attempted to record a metes and bounds
description for each disposal site for recordation in the county
deed records? (Yes) (No) _____

Part IV - Disposal Methods

- A. Disposal methods (on-site). Biological treatment ,
Chemical treatment , Volume reduction , Recovery ,
Storage , Dumping , Landfill , Landfarm ,
Incineration , Injection well , Lagoon/ponds ,
Other _____

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- b. Briefly describe the disposal methods used to dispose of each waste listed in Part II

See Part II - A.

- c. Sketch of facilities (sketch solid waste disposal operation showing dimensions of landfills, pits, ponds, injection wells, etc., location of incinerators, drainage routes, relationship of water bodies to disposal sites, monitor wells, and other pertinent features).

See map attached

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D. Are any wastes disposed of off-site? (Yes) (No) ____.

If yes, include transporter and location of disposal site

Malone - Texan City

City - Texan City Landfill

Are trip tickets used? (Yes) (No) ____.

Part IV - Surface and Groundwater Protection

A. Describe the methods used to control storm water runoff and/or spills

Shock Basin
Two Stormwater Potention Basins
Tank Fire walls
Site around completely site -
all water treated

B. Is there a wastewater discharge? (Yes) (No) _____. Is it permitted under the Water Quality Act? (Yes) (No) _____. Trace the flow of the discharge from the plant to the nearest major watercourse

to Swan Lake to Edinburg
buterton Bay then peaceful area
hurricane protection area, then to Padre Bay

C. Is Stream Segment No. 142 Water quality limiting? (Yes) _____. (No) .

D. Any evidence of spills or unauthorized discharges? (Yes) _____. (No) . If yes, discuss Refinery
completely dried

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- E. Is sufficient soil information available to evaluate the potential for adverse impact upon the groundwater? (Yes) (No)
Depth of water table, ____ feet. Uses of groundwater BR Anthony
provide process water, 3 wells used for test pump
- F. Do observations at the site suggest a possible impact upon the groundwater? (Yes) (No) If yes, please discuss
inclined APT separator, sludge ponds and one chemical pond - 20' x 100'
- G. Are the disposal sites located above the 100 year flood plain?
(Yes) (No) If no, does the company provide retention dikes with a minimum elevation equal to two (2) feet above the 50-year floodwater elevation to prevent floodwater or tidal inundation? (Yes) (No)
- H. Monitor wells? (Yes) (No) Describe the monitoring well system Landfarm aquic (2 wells)
- I. Is site in an area undergoing rapid land subsidence? (Yes)
(No) If yes, what is the annual rate? ____ per year.

Part V - Additional Information

- A. General housekeeping and groundskeeping. Discuss
Sloppy around APT separator
sludge ponds

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B. Describe the land use within one mile of the disposal site

industrial, commercial waste disposal

C. Is the site adequately fenced? (Yes) (No) _____. If no, why?

D. Characterize the odors emanating from the site

Oily

E. Other areas of concern

Smith Donaghue property -
Gypsum landfill

Part VI - Compliance

A. Is the disposal site presently under any Enforcement Order, Board Order or Court Order directed compliance schedule? (Yes) _____

(No) . If yes, are they compliant with that schedule?

(Yes) _____ (No) _____. If no, complete Part VI, C.

B. Except for compliance schedule, is the site otherwise compliant?

(Yes) (No) _____. If no, complete Part VI, C.

C. Discuss in detail what the site is noncompliant with, the reason why the site is noncompliant and recommended corrective action.

NOTE: If in the opinion of the district supervisor enforcement action is warranted, he will proceed in accordance with Texas Water Quality Board Enforcement Procedures.

See report

PLC:ED

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L. V. Durland
Refinery Manager

Amoco Texas Refining Company
P. O. Box 401
Houston, Texas 77069
(713) 945-1151

November 28, 1978

Mr. Jerry W. Mulligan
Texas Department of Water Resources
P. O. Box 13087 - Capitol Station
Austin, Texas 78711

Dear Sir:

Enclosed is the completed questionnaire on groundwater pollution potential.

All of these impoundments are owned and operated by the Gulf Coast Waste Disposal Authority; the permit covering them is issued to Amoco Texas Refining Company, No. WQ-000043. All of these impoundments are used in conjunction with the activated sludge facility Gulf Coast operates for Amoco. Impoundments 1 and 2 are used for temporary storage of refinery effluent as needed; therefore, no average flow rates are given. Impoundment 3 is used to stabilize inlet conditions to the activated sludge facility. Impoundment 4 is normally used as a shock basin to protect the activated sludge plant, but it is currently being used for ballast water storage as well until ballast water facilities are completed.

If you have any questions concerning this questionnaire, please contact Mr. C. V. Rice (713/945-1151) at the Texas City refinery.

Very truly yours,

L. V. Durland

Enclosure

bcc: C. V. Rice
Charles Canze - GCDMA
File T-2-1

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PLEASE RETURN WITHIN 30 DAYS TO:

Texas Department of Water Resources
SIA Coordinator
P. O. Box 13087, Capitol Station
Austin, Texas 78711

TEXAS DEPARTMENT OF WATER RESOURCES
INDUSTRIAL SURFACE IMPOUNDMENT ASSESSMENT

INSTRUCTIONS

PART I

- A. This information appears on the first page of your permit.
- B. Give the location of your facility by latitude and longitude. These can be determined using U.S. Geological Survey (USGS) topographic maps, or county highway maps available from the Texas Department of Highways and Public Transportation.
- C. Give the total number of waste handling impoundments located at this facility. An impoundment is defined as either a natural depression, an artificial excavation or a dike arrangement used primarily for storage, treatment or disposal of wastes in the form of fluids. If applicable, include impoundments associated with your Solid Waste Registration.

If the answer is 0, skip all other questions and go back only Part I of the questionnaire.

If the answer is one (1), skip questions D, E, and F and go to G.
- D. If there is more than one (1) impoundment at the site, give the total surface area in acres of all impoundments.
- E. If there is more than one (1) impoundment at the site, give the combined daily average flow in gallons per day of fluid being placed into all impoundments at the facility.
- F. If there is more than one (1) impoundment at the site, give the combined daily average flow in gallons per day of fluid being removed from all impoundments at the facility.
- G. A USGS topo map is preferred but any other map at a scale convenient to show all the impoundments on the site is acceptable. (See example attached).
- H. Give the name and phone number of the person preparing the questionnaire.

PART II: Part II begins on page 3 and continues through page 4. Space is provided for six (6) impoundments. If you should need more space, you may duplicate the blank form and/or attach any additional information.

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- A. Use the number given in PART I-G map.
- B. Give the age of the impoundment in years.
- C. Give the surface area of the impoundment in acres.
- D. Check the box indicating the purpose of the impoundment. If "other" is checked, please explain.
- E. If the impoundment is presently used, give the total number of years in use. If not, give the last year used.
 1. Give the average daily flow in gallons per day, of fluid being placed into the impoundment. If possible use 1977 records. If not indicate the year used.
 2. Give the average daily flow, in gallons per day, of fluid being discharged from this impoundment. This includes discharge to another lagoon, surface waters or stream. If possible use 1977 records. If not indicate the year used.
- F. Check the box indicating the type of liner used in the impoundment. If "other" is checked, please explain. If a soil or clay liner is constructed, give the thickness in inches.
- G. Briefly describe the waste placed in the impoundment.
- H. Give the number of monitoring wells associated with the impoundment and check the box indicating the monitoring frequency. If "other" is checked, please explain.

Part I - GENERAL INFORMATION

- A. Owner's Name Gulf Coast Waste Disposal Authority
Mailing Address 910 Bay Area Boulevard Houston, Texas 77058
Plant Name Amoco Texas City Refinery
- TDWR Permit No. WQ 0000443 NPDES No. TX 0003522
Solid Waste Registration No. 31139
- B. Location of Facility
Latitude 29° 21' 54" Longitude 94° 55' 17"
- C. Number of waste handling impoundments associated with this facility 4
- D. Surface area of all impoundments at this site 24.7 acres
- E. Average influent into all impoundments at this site _____ gallons per day.
- F. Average effluent from all impoundments at this site _____ gallons per day.
- G. Attach a USGS Topo Map, or other convenient map clearly showing all impoundments. Assign a number to each impoundment and refer to this number in Part II of the questionnaire.
- H. Prepared by:

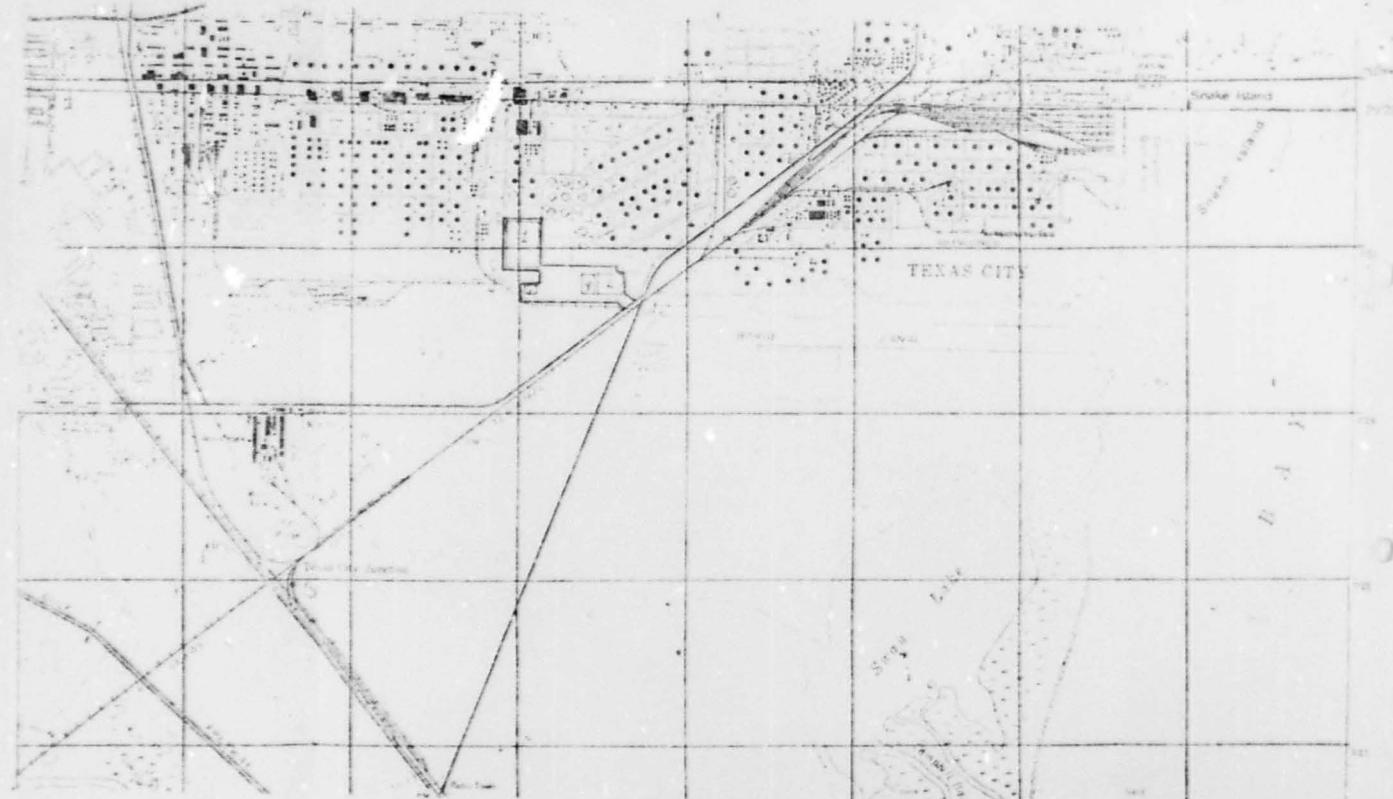
Charles Ganze 488-4115 November 28, 1978
Name Telephone No. Date

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C - F - H

PART II - IMPOUNDMENT INVENTORY

| | | |
|---|--|---------------------------|
| A. Impoundment No. 1 | B. Age 24 yrs. | C. Surface area 2.7 acres |
| D. Purpose of Impoundment | E. Is impoundment presently used? <input checked="" type="checkbox"/> Yes - Give number of years in use 24 <input type="checkbox"/> No - Give last year used _____ | |
| <input type="checkbox"/> Waste storage <input checked="" type="checkbox"/> Waste disposal <input type="checkbox"/> Waste treatment (specify) _____ <input type="checkbox"/> Other _____ | F. Average daily effluent Not Applicable gallons per day Year of record _____ Average daily effluent _____ gallons per day Year of record _____ | |
| G. Type of Liner <input checked="" type="checkbox"/> None <input type="checkbox"/> PVC <input type="checkbox"/> Compacted native soil <input type="checkbox"/> Hypalon <input type="checkbox"/> Select clay <input type="checkbox"/> Polyethylene <input type="checkbox"/> Bentonite-clay <input type="checkbox"/> Other _____ <input type="checkbox"/> Concrete _____ If clay liner give thickness in inches _____ | H. Type of waste Miscellaneous very wastes | |
| I. Number of Monitoring Wells 0 Frequency of Monitor Well sampling: <input type="checkbox"/> Monthly <input type="checkbox"/> Quarterly <input type="checkbox"/> Semiannually <input type="checkbox"/> Yearly <input type="checkbox"/> Other _____ | B. Age 26 yrs. C. Surface area 16.3 acres | |
| D. Purpose of Impoundment | E. Is impoundment presently used? <input type="checkbox"/> Yes - Give number of years in use 26 <input type="checkbox"/> No - Give last year used _____ | |
| <input type="checkbox"/> Waste storage <input checked="" type="checkbox"/> Waste disposal <input type="checkbox"/> Waste treatment (specify) _____ <input checked="" type="checkbox"/> Other Storage of area runoff | F. Average daily effluent Not Applicable gallons per day Year of record _____ Average daily effluent _____ gallons per day Year of record _____ | |
| G. Type of Liner <input type="checkbox"/> None <input type="checkbox"/> PVC <input type="checkbox"/> Compacted native soil <input type="checkbox"/> Hypalon <input type="checkbox"/> Select clay <input type="checkbox"/> Polyethylene <input type="checkbox"/> Bentonite-clay <input type="checkbox"/> Other _____ <input type="checkbox"/> Concrete _____ If clay liner give thickness in inches _____ | H. Type of waste Rainwater runoff | |
| I. Number of Monitoring Wells 0 Frequency of Monitor Well sampling: <input type="checkbox"/> Monthly <input type="checkbox"/> Quarterly <input type="checkbox"/> Semiannually <input type="checkbox"/> Yearly <input type="checkbox"/> Other _____ | B. Age 5 yrs. C. Surface area .35 acres | |
| D. Purpose of Impoundment | E. Is impoundment presently used? <input checked="" type="checkbox"/> Yes - Give number of years in use 5 <input type="checkbox"/> No - Give last year used _____ | |
| <input type="checkbox"/> Waste storage <input type="checkbox"/> Waste disposal <input type="checkbox"/> Waste treatment (specify) _____ <input checked="" type="checkbox"/> Other Storage of area runoff | F. Average daily effluent Not Applicable gallons per day Year of record _____ Average daily effluent _____ gallons per day Year of record _____ | |
| G. Type of Liner <input type="checkbox"/> None <input type="checkbox"/> PVC <input type="checkbox"/> Compacted native soil <input type="checkbox"/> Hypalon <input type="checkbox"/> Select clay <input type="checkbox"/> Polyethylene <input type="checkbox"/> Bentonite-clay <input type="checkbox"/> Other _____ <input type="checkbox"/> Concrete _____ If clay liner give thickness in inches _____ | H. Type of waste Rainwater runoff | |
| I. Number of Monitoring Wells 0 Frequency of Monitor Well sampling: <input type="checkbox"/> Monthly <input type="checkbox"/> Quarterly <input type="checkbox"/> Semiannually <input type="checkbox"/> Yearly <input type="checkbox"/> Other _____ | | |